

```
SEQUENCE LISTING
       University of Southern California
       Lin, Shi-Lung
       Ying, Shao-Yap
       RNA-mediated Gene Modulation
<120>
<130>
      89188.0050
<140>
       us 07/999,999
       2003-09-16
<141>
       US 60/411,062
<150>
<151>
       2002-09-16
      US 60/418,405
2002-10-12
<150>
<151>
<160> 32
<170> PatentIn version 3.2
<210>
<211>
       10
<212>
      RNA
<213>
      Artificial
<220>
<223> Splice acceptor
<220>
<221>
       misc_feature
<222>
       (2)..(2)
<223>
      n represents a, u or none
<220>
<221>
      misc_feature
<222>
       (3)..(3)
<223>
      k represents u or g
<220>
<221>
       misc_feature
<222>
       (4)..(4)
<223>
      s represents c or g
<220>
       misc_feature
<221>
<222>
<223>
      (6)..(6)
      y represents u or c
<220>
<221>
      misc_feature ·
<222>
       (7)..(7)
<223>
      r represents g or a
<400> 1
gnkscyrcag
                                                                          10
<210> 2
```

<211> 21

```
<212> RNA
<213> Artificial
<220>
<223> Poly-pyrimidine tract
<220>
<221>
      misc_feature
<222>
      (2)..(2)
      y represents c or u
<223>
<220>
<221>
      misc_feature
<222>
       (3)..(4)
<223>
      nn represents uy or none-none, y represents c or u
<220>
<221>
      misc_feature
<222>
       (5)..(6)
<223>
      nn represents uy or none-none, y represents c or u
<220>
<221>
      misc_feature
<222>
       (7)..(7)
<223>
      n represents c or none
<220>
<221> misc_feature
<222>
      (15)..(19)
<223>
      n represents u or none
<220>
<221>
      misc_feature
<222>
      (21)..(21)
<223>
     n represents c or none
<400> 2
uynnnnuuu uuuunnnnnc n
<210> 3
      30
<211>
<212>
      RNA
<213>
      Artificial
<220>
<223>
      Poly-pyrimidine tract
<220>
      misc_feature
<221>
<222>
      (15)..(16)
<223>
     nn represents uc or none-none
<220>
<221>
      misc_feature
<222>
       (17)..(18)
<223>
      nn represents uc or none-none
<220>
      misc_feature
<221>
<222>
      (19)..(20)
```

Page 2

21

89188.0050.ST25.txt <223> nn represents uc or none-none <220> <221> <222> misc_feature (21)..(22)<223> nn represents uc or none-none <220> <221> misc_feature <222> (23)..(24)<223> nn represents uc or none-none <220> <221> misc_feature <222> (25)..(25) <223> n represents a, g, c or u <220> <221> misc_feature <222> (30)..(30)<223> n represents g or none <400> 3 30 ucucucucu ucucnnnnn nnnnncuagn <210> <211> 12 <212> RNA <213> Artificial <220> <223> Splice donor <400> 4 12 agguaagagg au <210> 10 <211> <212> RNA <213> Artificial <220> <223> Splice donor <400> 5 agguaagagu 10 <210> 6 13 <211> <212> RNA <213> Artificial <220> <223> Splice acceptor <400> 6 13 gauauccugc agg <210> 7

<211> <212> <213>	42 DNA Artificial				
<220>					
<223> <400>	Oligonucleotide 7				
	ggat ccgatcgcag gagcgcacca	tcttcttcaa	ga		42
<210> <211> <212> <213>	8 46 DNA Artificial				
<220> <223>	Oligonucleotide				
<400> cgcgtc	8 ttga agaagatggt gcgctcctgc	gatcggatcc	tcttac		46
<210> <211> <212> <213>	9 42 DNA Artificial				
<220> <223>	Oligonucleotide				
<400> gtaagag	9 ggat ccgatcgctt gaagaagatg	gtgcgctcct	ga		42
<210> <211> <212> <213>	10 46 DNA Artificial				
<220> <223>	Oligonucleotide	,			
<400> cgcgtca	10 agga gcgcaccatc ttcttcaagc	gatcggatcc	tcttac		46
<210> <211> <212> <213>	11 70 DNA Artificial				
<220> <223>	Oligonucleotide				
<400> gtaagag	11 ggat ccgatcgcag gagcgcacca	tcttcttcaa	gttaacttga	agaagatggt	60
gcgctcctga 7					70
<210>	12				

<212> <213>	DNA Artificial	09100.0030.	3123. LAC		
<220> <223>	Oligonucleotide				
<400> cgcgtca	12 agga gcgcaccatc ttcttcaagt	taacttgaag	aagatggtgc	gctcctgcga	60
tcggate	tcggatcctc ttac				
<210> <211> <212> <213>	13 47 DNA Artificial				
<220> <223>	Oligonucleotide				
<400> cgcgtta	13 acta actggtacct cttcttttt	tttttgatat	cctgcag		47
<210> <211> <212> <213>					
<220> <223>	Oligonucleotide				
<400> 14 gtcctgcagg atatcaaaaa aaaaagaaga ggtaccagtt agtaa 4					45
<210> <211> <212> <213>	15 27 DNA Artificial				
<220> <223>	Primer				•
<400> ctcgago	15 catg gtgagcggcc tgctgaa				27
<210> <211> <212> <213>	16 27 DNA Artificial				
<220> <223>	Primer				
<400> 16 tctagaagtt ggccttctcg ggcaggt 2					27
<210> <211> <212>	17 25 DNA				

89188.0050.ST25.txt <213> Artificial <220> <223> Oligonucleotide <400> 17 25 cgcaagcagg gccaaattgt gggta <210> 18 <211> 31 <212> DNA Artificial <213> <220> <223> Oligonucleotide <400> 18 tagcacccac aatttggccc tgcttgtgcg c 31 19 25 <210> <211> <212> DNA <213> Artificial <220> <223> Oligonucleotide <400> 19 25 cgacccacaa tttggccctg cttga <210> <211> 20 31 <212> DNA Artificial <213> <220> <223> Oligonucleotide <400> 20 31 tagccaagca gggccaaatt gtgggttgcg c <210> 21 <211> 51 <212> DNA Artificial <213> <220> <223> Oligonucleotide <400> 21 cgcaagcagg gccaaattgt gggtttaaac ccacaatttg gccctgcttg a 51

<210> 22 <211> 57 <212> DNA <213> Artificial

<220>

89188,0050,ST25,txt

<223>	Oligonucleotide	09100.0000.	312J. LAC		
<400> tagcac	22 ccac aatttggccc tgcttgaatt	caagcagggc	caaattgtgg	gttgcgc	57
<210> <211> <212> <213>	23 75 DNA Artificial				
<220> <223>	Probe				
<400> cctggc	23 cccc tgctgcgagt acggcagcag	gacgtaagag	gatccgatcg	caggagcgca	60
ccatct	tctt caagt				75
<210> <211> <212> <213>	24 10 DNA Artificial				
<220> <223>	Splice donor				
<220> <221> <222> <223>	misc_feature (6)(6) n represents a or none				
<220> <221> <222> <223>	misc_feature (10)(10) k represents g or t				
<400> aggtan	24 gagk				10
<210> <211> <212> <213>	25 12 DNA Artificial				
<220> <223>	Splice donor				
<400> aggtaa	25 gagg at				12
<210> <211> <212> <213>	26 10 DNA Artificial				
<220>	Splice donor				

```
<400> 26
                                                                         10
aggtaagagt
<210>
       27
<211>
       11
<212>
      DNA
      Artificial
<213>
<220>
<223> Splice acceptor
<220>
<221>
       misc_feature
<222>
       (2)..(2)
<223>
      n represents w or none, w represents a or t
<220>
<221>
      misc_feature
<222>
<223>
       (3)..(3)
      k represents t or g
<220>
<221>
      misc_feature
<222>
<223>
       (4)..(4)
       s represents c or g
<220>
<221>
      misc_feature
<222>
      (6)..(6)
<223>
     y represents t or c
<220>
<221>
      misc_feature
<222>
      (7)..(7)
<223> r represents g or a
<220>
<221>
<222>
      misc_feature
       (11)..(11)
<223>
     s represents g or c
<400> 27
                                                                         11
gnkscyrcag s
<210> 28
<211>
       13
<212>
      DNA
<213>
      Artificial
<220>
<223>
      Splice acceptor
<400> 28
gatatcctgc agg
                                                                         13
<210>
       29
<211>
       15
<212>
      DNA
<213> Artificial
```

Page 8

```
<220>
<223>
       Poly-pyrimidine tract
<400> 29
                                                                         15
tcttctttt ttttt
<210>
       30
<211>
       14
<212>
       DNA
<213>
      Artificial
<220>
<223>
      Splice acceptor
<400> 30
                                                                         14
gatatcctgc aggc
<210>
       31
       21
<211>
<212>
      DNA
<213>
      Artificial
<220>
<223>
       Poly-pyrimidine tract
<220>
<221>
       misc_feature
<222>
      (2)..(2)
<223> y represents c or t
<220>
<221>
      misc_feature
<222>
       (3)..(4)
<223>
      nn represents ty or none-none, y represents c or t
<220>
<221>
       misc_feature
<222>
       (5)..(6)
<223>
       nn represents ty or none-none, y represents c or t
<220>
<221>
       misc_feature
<222>
      (7)..(7)
<223>
       n represents c or none
<220>
<221>
       misc_feature
<222>
       (15)..(19)
<223>
      n represents t or none
<220>
<221>
       misc_feature
<222>
       (21)..(21)
      n represents c or none
<223>
<400> 31
                                                                         21
tynnnnttt ttttnnnnnc n
```

```
32
<210>
<211>
       30
<212>
       DNA
<213>
       Artificial
<220>
<223>
       Poly-pyrimidine tract
<220>
<221>
       misc_feature
<222>
       (15)..(16)
<223>
       nn represents to or none-none
<220>
<221>
       misc_feature
<222>
       (17)..(18)
<223>
       nn represents to or none-none
<220>
<221>
       misc_feature
       (19)..(20)
<222>
<223>
       nn represents tc or none-none
<220>
<221>
<222>
       misc_feature
       (21)..(22)
<223>
       nn represents to or none-none
<220>
<221>
<222>
       misc_feature
       (23)..(24)
<223>
       nn represents to or none-none
<220>
<221>
      misc_feature
<222>
       (25)..(25)
<223>
       n represents a, g, c or t
<220>
<221>
       misc_feature
<222>
       (30)..(30)
<223>
       n represents g or none
<400> 32
```

tctctctct tctcnnnnn nnnnctagn

30